

TABLE 5
NATALITY DATA: SELECTED CHARACTERISTICS
AND FETAL DEATHS
OBSERVED VERSUS EXPECTED CASES
1986-1990

Birth Characteristics	Observed Number in Study Area	Expected Number Based on Rates for:		Significant Differences in Study Area Data Compared to:	
		State	County	State	County
Total Live Births	10,001	-	-		
Birth Weight < 2500G	1,023	694.1	850.1	Higher	Higher
Gestation < 37 weeks	1200	888.0	999.1	Higher	Higher
5-Min APGAR < 8	2,715	2,148.2	2,527.3	Higher	Higher
1-Min APGAR < 8	421	339.0	403.0	Higher	
Total Fetal Deaths	53	66.4	68.4		

TABLE 6
NATALITY DATA:
MULTI-SOURCE BIRTH DEFECT REGISTRY
OBSERVED VERSUS EXPECTED CASES
1980-1986

Birth Characteristic	Observed Number in Study Area	Expected Number Based on Rates for:		Significant* Differences in Study Area Data Compared to:	
		State	County	State	County
Total Live Births	16,536	73,930	16,536		
Births with Anomalies	933	633.1	881.4	Higher	
<u>Anomalies by Type**</u>					
Nervous System	26	29.8	29.8		
Eye	11	9.9	9.9		
Ear, Face, Neck	30	26.5	31.4		
Circulatory System	141	124.0	137.2		
Respiratory System	29	19.8	24.8	Higher	
Cleft Lip/Palate	35	26.5	29.8		
Other Upper Alimentary	16	39.7	16.5	Lower	
Other Digestive	29	21.5	26.5		
Genital Organs	138	97.6	124.0	Higher	
Urinary Organs	25	14.9	18.2		
Poly/Syndactyly	91	39.7	72.8	Higher	
Club Foot	65	43.3	44.6	Higher	Higher
Dislocation of Hip	11	9.9	9.9		
Limb Reduction	6	6.6	6.6		
Other Musculoskeletal	122	86.0	115.8	Higher	
Skin, Hair, Nails	166	72.8	178.6	Higher	
Chromosomal Anomalies	21	21.5	23.2		
Other Anomalies	128	84.3	122.4	Higher	

* Statistical significance determined by Poisson statistic rather than Chi-square.

** A child may have more than one anomaly.

TABLE 7
SOCIOECONOMIC COMPARISON BETWEEN
STUDY AREA, JACKSON COUNTY, AND MISSOURI

Indicator	Study Area	Jackson County	Missouri
% Persons Who Completed 4 Years High School (25+ Years of Age)	51.7%	70.7%	63.5%
% Employed (16+ Years of Age)	58.1%	65.6%	61.1%
Median Household Income	\$12,781	\$16,887	\$15,581
Per Capita Income	\$5,918	\$7,610	\$6,917
% Families Below Poverty Level	14.4%	7.9%	9.1%

Source: 1980 Census Data (References 6, 7, and 8)

APPENDIX A
LIST OF DISEASES
— AND ICD CODES

APPENDIX A
SELECTED ICD CODES

ALL CAUSES	001-999
NEOPLASMS, MALIGNANT	140-208
Malignant neoplasm of digestive organs and peritoneum	150-159
Malignant neoplasm of respiratory organs	160-165
Malignant neoplasm of nasal cavities, middle ear, and accessory sinuses	160
Nasal cavities	160.0
Malignant neoplasm of larynx	161
Larynx, unspecified	161.9
Malignant neoplasm of trachea, bronchus, and lung	162
Bronchus and lung, unspecified	162.9
Malignant neoplasm of other and ill- defined sites within the respiratory system and intrathoracic organs	165
Upper respiratory tract, part unspecified	165.0
Malignant melanoma of skin	172
Other malignant neoplasms of skin	173
Malignant neoplasm of breast	174-175
Malignant neoplasm of genital organs	179-187
Malignant neoplasm of penis and other male genital organs	187
Scrotum	187.7
Site unspecified	187.9
Malignant neoplasm of urinary organs	188-189
Multiple myeloma and immunoproliferative neoplasms	203
Multiple myeloma	203.0
Leukemias	204-208
NEOPLASMS, BENIGN	210-229
Disorder of function of the stomach	536
Acute dilation of stomach	526.1
APENDTEX.A	A-1

Dyspepsia and other disorders	536.8
Unspecified functional disorders of stomach	536.9
Other diseases of digestive system	570-579
Chronic liver disease and cirrhosis	571
Cirrhosis of liver without mention of alcohol	571.5
Other chronic nonalcoholic liver disease	571.8
Unspecified chronic liver diseases without mention of alcohol	571.9
Diseases of the skin and subcutaneous tissue	680-709
Contact dermatitis and other eczema	692
Due to oils and greases	692.1
Due to solvents	692.2
Due to other chemical products	692.4
Due to solar radiation	692.7
Unspecified causes	692.9
Other hypertrophic and atrophic conditions of the skin	701
Specified	701.8
Unspecified	701.9
Dyschromia	709

APPENDIX B
CANCER INCIDENCE DATA

MISSOURI CANCER REGISTRY
MISSOURI DEPARTMENT OF HEALTH
STATE OF MISSOURI

CANCER CASES DIAGNOSED IN 1985-89

YEAR OF FIRST DIAGNOSIS OF THIS CANCER.

DX_YR	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
85	20535	19.7	20535	19.7
86	21624	20.7	42159	40.4
87	21150	20.3	63309	60.7
88	21423	20.6	84732	81.3
89	19512	18.7	104244	100.0

SITEN	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
BRONCHUS & LUNG	17587	16.9	17587	16.9
LARYNX	1411	1.4	18998	18.2
MALE GENITAL ORG	146	0.1	19144	18.4
MELANOMA	1432	1.4	20576	19.7
MULTIPLE MYELOMA	959	0.9	21535	20.7
NASAL CAVITIES	179	0.2	21714	20.8
OTHER CANCER SIT	79927	76.7	101641	97.5
RESPIRATORY ORGA	214	0.2	101855	97.7
SKIN CANCER	2389	2.3	104244	100.0

AGEHO	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
0 TO 14	797	0.8	797	0.8
15 TO 44	10682	10.2	11479	11.0
45 TO 64	31810	30.5	43289	41.5
65 TO 74	30522	29.3	73811	70.8
75 PLUS	30433	29.2	104244	100.0

DATA UPDATED TO 3RD QUARTER 1991

MISSOURI CANCER REGISTRY
MISSOURI DEPARTMENT OF HEALTH
STATE OF MISSOURI

CANCER CASES DIAGNOSED IN 1985-89

TABLE OF SITES BY AGE MO

SITE	AGE MO	10 TO 14	15 TO 44	45 TO 64	65 TO 74	75 PLUS	TOTAL
FREQUENCY							
BRONCHUS & LUNG		4	434	6768	6348	4033	17587
LARYNX		1	51	694	425	240	1411
MALE GENITAL ORG		2	14	60	32	38	146
MELANOMA		4	381	505	298	244	1432
MULTIPLE MYELOMA		2	16	252	326	363	959
NASAL CAVITIES		4	23	64	53	35	179
OTHER CANCER SIT		755	9513	22810	22377	24472	79927
RESPIRATORY ORGA		15	29	63	59	48	214
SKIN CANCER		10	221	594	604	960	2389
TOTAL		797	10682	31810	30522	30433	104244

DATA UPDATED TO 3RD QUARTER 1991

MISSOURI CANCER REGISTRY
MISSOURI DEPARTMENT OF HEALTH
STATE OF MISSOURI

CANCER CASES DIAGNOSED IN 1985-89

TABLE OF SITES BY DX_YR

SITE	DX_YR	YEAR	OF FIRST	DIAGNOSIS	OF THIS	CANCER.	
FREQUENCY	85	86	87	88	89	TOTAL	
BRONCHUS & LUNG	3520	3696	3449	3612	3310	17587	
LARYNX	285	333	301	275	217	1411	
MALE GENITAL ORG	30	26	43	29	16	146	
MELANOMA	284	300	308	275	265	1432	
MULTIPLE MYELOMA	196	226	175	176	186	959	
NASAL CAVITIES	41	37	37	30	34	179	
OTHER CANCER SIT	15670	16405	16335	16495	15024	79927	
RESPIRATORY ORGA	36	42	48	38	50	214	
SKIN CANCER	473	557	454	495	410	2389	
TOTAL	20535	21624	21150	21423	19512	104244	

APPENDIX C
MORTALITY DATA

DATA UPDATED TO 3RD QUARTER 1991

TOTAL DEATHS BY SELECTED CAUSES FOR SELECTED ZIPCODES *, 1986-1990
OBSERVED VS EXPECTED DEATHS BASED ON MISSOURI AND COUNTY ** AGE-SPECIFIC RATES

CAUSES OF DEATH (ICD-9)	OBSERVED DEATHS	EXPECTED DEATHS BASED ON		SIGNIFICANT DIFFERENCE ***	
		STATE RATES	COUNTY RATES	STATE	COUNTY
ALL DEATHS	6,251	7001.7	7067.4	YES	YES
NEOPLASMS					
BREAST CAN	117	135.8	149.5	NO	YES
BRONCH LUNG UNSPEC	477	473.4	491.0	NO	NO
DIGESTIVE CAN	354	364.2	375.8	NO	NO
GENITAL ORG CAN	161	168.7	168.1	NO	NO
LARYNX UNSPEC	15	11.1	12.2	NO	NO
LEUKEMIA	43	58.8	55.0	NO	NO
MAL MELANOMA OF SKIN	11	18.1	18.8	NO	NO
MAL NEO OF LARYNX	15	12.0	12.9	NO	NO
MAL NEO OF NASAL CAVITIES	3	1.4	1.6	NO	NO
MAL NEO OF PENIS	0	0.6	0.7	NO	NO
MAL NEO OF SCROTUM	0	0.0	0.0	NO	NO
MAL NEO TRENCH BRONCH LUNG	479	476.3	493.7	NO	NO
MULT MYELOMA	24	25.1	21.9	NO	NO
MULT MYELOMA IMMUNOPROLIF NEO	24	25.3	21.9	NO	NO
NASAL CAVITIES	0	0.1	0.5	NO	NO
OTHER CANCERS	300	320.5	325.5	NO	NO
OTHER MAL NEO OF SKIN	11	8.5	9.2	NO	NO
RESPIRAT CAN	497	492.0	510.4	NO	NO
URINARY ORGAN CAN	55	63.7	62.3	NO	NO
ALL NEOPLASMS (140-239)	1,549	1623.1	1665.9	NO	YES
MALIGNANT NEOPLASMS (140-208)	1,527	1603.8	1646.6	NO	YES
BENIGN NEOPLASMS (210-229)	7	4.9	6.0	NO	NO

OTHER SELECTED CAUSES

ACUTE DILATION OF STOMACH	0	0.0	0.0	NO	NO
ACUTE/SUBACUTE NECROSIS OF LIV	0	1.0	1.3	NO	NO
CHRONIC LIVER DIS/CIRRHOSIS	70	57.5	74.2	NO	NO
CIRRHOSIS OF LIVER W/O ALCOHOL	36	30.2	34.9	NO	NO
DIS FUNCT OF STOMACH	0	0.6	0.2	NO	NO
DYSPEPSIA ETC	0	0.1	0.0	NO	NO
OTHER CHRONIC NON ALCOHOL DIS	0	0.2	0.0	NO	NO
OTHER DIS DIGEST SYST	137	123.7	142.9	NO	NO
UNSPEC CHRON LIVR DIS W/O ALCO	0	0.4	0.4	NO	NO
UNSPEC FUJINT DISORDER STOMACH	0	0.4	0.2	NO	NO

* SELECTED ZIPCODE 64120, 64123, 64124, 64125, 64126, 64127, 64128, 64129, 64052, 64053, AND 64054.

** COMPARED TO JACKSON COUNTY.

*** FOR EXPECTED DEATHS OF 5 OR MORE, CHI-SQUARE DISTRIBUTION WAS USED.

FOR EXPECTED DEATHS LESS THAN 5, POISSON DISTRIBUTION WAS USED.

TOTAL DEATHS BY SELECTED CAUSES AND AGE GROUPS
MISSOURI: 1986-1990

CAUSES OF DEATH (ICD-9)	NUMBER OF DEATHS				
	ALL	0-14	15-44	45-64	65-74
AGES *	YRS	YRS	YRS	YRS	YRS
251,333	5,551	16,234	41,133	54,224	134,163
NEOPLASMS					
BREAST CAN	4,759	0	396	1,549	1,251
BRONCH LUNG UNSPEC	16,258	1	289	1,444	5,851
DIGESTIVE CAN	12,790	1	296	2,867	3,658
GENITAL ORG CAN	5,965	0	203	1,066	1,662
LARYNX UNSPEC	383	0	7	125	131
LEUKEMIA	2,101	65	182	424	501
MAL MELANOMA OF SKIN	641	0	109	236	137
MAL NEO OF LARYNX	412	0	7	139	139
MAL NEO OF NASAL CAVITIES	48	0	3	15	18
MAL NEO OF PENIS	20	0	0	5	8
MAL NEO OF SCROTUM	1	0	0	0	1
MAL NEO TREACH BRONCH LUNG	16,356	1	292	5,472	5,886
MULT MYELOMA	877	0	9	189	286
MULT MYELOMA IMMUNOPROLIF NEO	882	0	9	192	287
NASAL CAVITIES	5	0	0	2	1
OTHER CANCERS	11,274	121	807	3,064	3,108
OTHER MAL NEO OF SKIN	298	0	21	82	77
RESPIRAT CAN	16,901	1	316	5,648	6,067
URINARY	2,236	10	53	531	621
ALL NEOPLASMS (140-239)	56,720	220	2,313	15,273	17,023
MALIGNANT NEOPLASMS (140-208)	56,026	198	2,253	15,149	16,868
BENIGN NEOPLASMS (210-229)	176	5	13	35	40
OTHER SELECTED CAUSES					
ACUTE DILATION OF STOMACH	1	0	0	0	0
ACUTE/SUBACUTE NECROSIS OF LIV	34	0	1	6	16
CHRONIC LIVER DIS/CIRRHOSIS	2,010	1	270	840	502
CIRRHOSIS OF LIVER W/O ALCOHOL	1,051	1	81	389	294
DIS FUNCT OF STOMACH	20	0	0	3	3
DYSPEPSIA ETC	4	0	0	1	0
OTHER CHRONIC NON ALCOHOL DIS	8	2	5	1	0
OTHER DIS DIGEST SYST	4,377	23	421	1,315	990
UNSPC CHRON LIVR DIS W/O ALCO	14	0	3	3	5
UNSPC FUNCT DISORDER STOMACH	14	0	0	1	3

* MAY INCLUDE DEATHS OF UNKNOWN AGE.

TOTAL DEATHS BY SELECTED CAUSES AND AGE GROUPS
JACKSON COUNTY, 1986-1990

CAUSES OF DEATH (ICD-9)	NUMBER OF DEATHS				75 +	
	ALL	0-14	15-44	45-64	65-74	YRS
AGES *	YRS	YRS	YRS	YRS	YRS	YRS
ALL DEATHS	30,808	869	2,606	5,646	6,499	15,184
NEOPLASMS						
BREAST CAN	640	0	58	206	167	209
BRONCH LUNG UNSPEC	2,036	0	35	698	718	585
DIGESTIVE CAN	1,586	0	46	391	467	682
GENITAL ORG CAN	1,717	0	27	146	186	358
LARYNX UNSPEC	50	0	2	10	22	16
LEUKEMIA	240	9	28	53	54	96
MAL MELANOMA OF SKIN	83	0	16	34	14	19
MAL NEO OF LARYNX	53	0	2	13	22	16
MAL NEO OF NASAL CAVITIES	7	0	1	3	2	1
MAL NEO OF PENIS	3	0	0	2	1	0
MAL NEO TREACH BRONCH LUNG	2,047	0	35	700	722	590
MULT MYELOMA	91	0	1	19	33	38
MULT MYELOMA IMMUNOPROLIF NEO	91	0	1	19	33	38
NASAL CAVITIES	2	0	0	0	1	1
OTHER CANCERS	1,393	16	108	415	365	489
OTHER MAL NEO OF SKIN	38	0	1	14	15	8
RESPIRAT CAN	2,116	0	39	719	750	608
URINARY ORGAN CAN	265	3	6	62	69	125
ALL NEOPLASMS (140-239)	7,042	30	323	2,014	2,073	2,602
MALIGNANT NEOPLASMS (140-208)	6,957	28	312	1,992	2,058	2,567
BENIGN NEOPLASMS (210-229)	27	1	5	7	4	10
OTHER SELECTED CAUSES						
ACUTE/SUBACUTE NECROSIS OF LIV	6	0	0	1	0	5
CHRONIC LIVER DIS/CIRRHOSIS	322	0	47	163	67	45
CIRRHOSIS OF LIVER W/O ALCOHOL	149	0	11	74	34	30
DIS FUNCT OF STOMACH	1	0	0	0	0	1
OTHER DIS DIGEST SYST	622	3	77	226	127	189
UNSPC CHRON LIVR DIS W/O ALCO	2	0	1	0	0	1
UNSPC FUNCT DISORDER STOMACH	1	0	0	0	0	1

* MAY INCLUDE DEATHS OF UNKNOWN AGE.

TOTAL DEATHS BY SELECTED CAUSES AND AGE GROUPS
SELECTED ZIPCODES: 1986-1990

CAUSES OF DEATH (ICD-9)	NUMBER OF DEATHS					75 +
	ALL	0-14	15-44	45-64	65-74	
AGES *	YRS	YRS	YRS	YRS	YRS	YRS
ALL DEATHS	6,251	205	487	1,321	1,487	2,751
NEOPLASMS						
BREAST CAN	117	0	7	36	32	42
BRONCH LUNG UNSPEC	477	0	7	181	156	133
DIGESTIVE CAN	354	0	5	90	116	143
GENITAL ORG CAN	161	0	2	40	50	69
LARYNX UNSPEC	15	0	0	3	8	4
LEUKEMIA	43	2	4	9	12	16
MAL MELANOMA OF SKIN	11	0	1	3	4	3
MAL NEO OF LARYNX	15	0	0	3	8	4
MAL NEO OF NASAL CAVITIES	3	0	1	1	1	0
MAL NEO TREACH BRONCH LUNG	479	0	7	181	156	135
MULT MYELOMA	24	0	0	4	9	11
MULT MVELOMA IMMUNOPROLIF NEO	24	0	0	4	9	11
OTHER CANCERS	300	1	23	98	86	92
OTHER MAL NEO OF SKIN	11	0	1	4	3	3
RESPIRAT CAN	497	0	8	185	165	139
URINARY ORGAN CAN	55	0	2	9	16	28
ALL NEOPLASMS (140-239)	1,549	4	53	472	481	539
MALIGNANT NEOPLASMS (140-208)	1,527	3	51	467	477	529
BENIGN NEOPLASMS (210-229)	7	0	1	2	1	3
OTHER SELECTED CAUSES						
CHRONIC LIVER DIS/CIRRHOSIS	70	0	9	32	18	11
CIRRHOSIS OF LIVER W/O ALCOHOL	36	0	1	15	12	8
OTHER DIS DIGEST SYST	137	0	20	46	32	39

* MAY INCLUDE DEATHS OF UNKNOWN AGE.

SELECTED ZIPCODE 64120, 64123, 64124,
64125, 64126, 64127, 64128, 64129, 64052, 64053, AND 64054.

APPENDIX D
MORBIDITY DATA

HOSPITAL DISCHARGES BY SELECTED PRINCIPAL DIAGNOSES FOR SELECTED ZIPCODES * 1983-1987
OBSERVED VS EXPECTED DISCHARGES BASED ON MISSOURI AND JACKSON COUNTIES ** AGE-SPECIFIC RATES

PRINCIPAL DIAGNOSIS (ICD-9)	OBSERVED DISCHARGES	EXPECTED DISCHARGES BASED ON STATE RATES	COUNTY RATES	STATE	COUNTY	SIGNIFICANT DIFFERENCE FROM
ALL DISCHARGES	101,882			NO	NO	

NEOPLASMS

BREAST CAN	409	460.3	478.9	YES	YES	YES
BRONCH LUNG UNSPEC	487	425.0	439.4	YES	YES	YES
DIGESTIVE CAN	862	762.6	774.2	YES	YES	YES
GENITAL ORG CAN	717	689.3	656.5	NO	YES	YES
LARYNX UNSPEC	32	137.3	26.6	YES	YES	NO
LEUKEMIA	133	137.3	113.1	NO	NO	NO
MAL MELANOMA OF SKIN	24	41.6	36.8	YES	YES	YES
MAL NEO OF LARYNX	77	49.3	53.4	YES	YES	YES
MAL NEO OF NASAL CAVITIES	4	9.0	6.4	NO	NO	NO
MAL NEO OF PENIS ETC	7	4.0	3.0	NO	YES	YES
MAL NEO OF SCROTUM	2	0.4	0.9	NO	NO	NO
MAL NEO OTHER/ILL DEF SITE	1	0.1	0.2	NO	NO	NO
MAL NEO TRENCH BRONCH LUNG	834	693.7	724.4	YES	YES	YES
MULT MYELOMA	58	58.8	55.5	NO	NO	NO
MULT MYELOMA IMMUNOPROLIF NEO	59	60.6	57.1	NO	NO	NO
NASAL CAVITIES	2	3.2	2.7	NO	NO	NO
OTHER CANCERS	1,456	1635.2	1526.9	YES	YES	NO
OTHER MAL NEO OF SKIN	63	70.5	61.4	NO	NO	NO
RESPIRAT CAN	930	762.5	795.2	YES	YES	YES
URINARY ORGAN CAN	338	317.4	320.0	NO	NO	NO
ALL NEOPLASMS (140-239)	6,094	6201.9	6073.9	NO	NO	NO
MALIGNANT NEOPLASMS (140-209)	4,845	4764.6	4664.8	NO	NO	YES
BENIGN NEOPLASMS (210-229)	1,005	1142.1	1168.6	YES	YES	YES

OTHER SELECTED DIAGNOSES

ACUTE DILATION OF STOMACH	0	2.4	2.0	NO	NO	NO
ACUTE/SUBACUTE NECROSIS OF LIV	20	14.7	19.1	NO	NO	NO
CHRONIC LIVER DIS/CIRRHOSIS	249	175.0	225.2	YES	YES	NO
CIRRHOSIS OF LIVER W/O ALCOHOL	68	52.9	56.5	NO	NO	NO
CONTACT DERMATITIS	30	30.8	24.9	NO	NO	NO
DERM DUE TO OTHER CHEM PROD	0	0.4	0.2	NO	NO	NO
DERM DUE TO SOLVENTS	0	0.0	0.0	NO	NO	NO
DERM DUE TO UNSPEC CAUSE	20	22.8	17.9	NO	NO	NO
DIS FUNCT OF STOMACH	101	125.0	93.9	YES	YES	YES
DIS OF SKIN	1,625	1282.1	1467.6	YES	YES	YES
DYSCHROMIA	0	1.2	1.2	NO	NO	NO
DYSPEPSIA ETC	75	76.9	70.8	NO	NO	NO
OTHER CHRONIC NON ALCOH LIV DI	11	12.5	10.9	NO	NO	NO
OTHER DIS DIGEST SYST.	2,098	2808.9	2756.7	YES	YES	YES
OTHER HYPERTROPHIC/ATROPHIC SK	1	12.5	4.5	NO	NO	NO
UNSPEC HYPERTROPHIC/ATROPHIC SK	3	5.9	11.7	YES	YES	YES
UNSPEC CHRONIC LIV DIS W/O ALC	4	32.1	13.1	NO	NO	NO
UNSPEC-FUNCT-DISORDER-STOMACH	22	32.8	13.2	YES	YES	YES

HOSPITAL DISCHARGES BY SELECTED PRINCIPAL DIAGNOSES FOR SELECTED ZIPCODES * 1983-1987
OBSERVED VS EXPECTED DISCHARGES BASED ON MISSOURI AND JACKSON COUNTIES ** AGE-SPECIFIC RATES

PRINCIPAL DIAGNOSIS (ICD-9)	OBSERVED DISCHARGES	EXPECTED DISCHARGES BASED ON		SIGNIFICANT DIFFERENCE ***	
		STATE RATES	COUNTY RATES	STATE	COUNTY
OTHER SELECTED DIAGNOSES, CONTINUED					
SELECTED ZIPCODES 64120, 64123, 64124, 64125, 64126, 64127					
64128, 64129, 64052, 64053, AND 64054					

*** FOR EXPECTED DISCHARGES OF 5 OR MORE, CHI-SQUARE DISTRIBUTION WAS USED.
FOR EXPECTED DISCHARGES LESS THAN 5, POISSON DISTRIBUTION WAS USED.

HOSPITAL DISCHARGES BY SELECTED PRINCIPAL DIAGNOSES AND AGE GROUPS MISSOURI: 1983-1987

PRINCIPAL DIAGNOSIS (ICD-9)	NUMBER OF DISCHARGES				
	ALL	0-14	15-44	45-64	65-74
AGES *	YRS	YRS	YRS	YRS	YRS
ALL DISCHARGES	3,610,679	294,163	1,291,869	769,614	559,006
					694,073
NEOPLASMS					
BREAST CAN	16,446	9	2,177	6,580	4,129
BRONCH LUNG UNSPEC	15,202	10	484	6,589	5,199
DIGESTIVE CAN	28,188	70	1,039	7,769	8,562
GENITAL ORG CAN	25,224	42	2,372	6,629	7,918
LARYNX UNSPEC	4,959	571	805	1,188	1,225
LEUKEMIA	1,464	2	397	1,554	1,043
MAL MELANOMA OF SKIN	1,754	2	82	92	549
MAL NEO OF LARYNX	1,323	20	13	48	100
MAL NEO OF NASAL CAVITIES	146	0	3	5	42
MAL NEO OF PENIS ETC	15	0	1	1	5
MAL NEO OF SCROTUM	5	0	1	1	0
MAL NEO OTHER/ILL DEF SITE	24,861	14	739	10,167	8,802
MAL NEO TREAACH BRONCH LUNG	2,151	2	46	714	703
MULT MYELOMA	2,218	2	51	739	703
MULT MYELOMA IMMUNOPROLIF NEO	114	0	16	31	29
NASAL CAVITIES	58,775	1,055	6,826	20,456	16,319
OTHER CANCERS	2,635	22	149	624	643
OTHER MAL NEO OF SKIN	27,307	44	934	11,221	9,533
RESPIRAT CAN	11,743	98	358	3,036	3,785
URINARY ORGAN CAN	222,569	3,611	36,365	72,496	57,092
ALL NEOPLASMS (140-239)	172,642	1,889	14,511	56,879	51,289
MALIGNANT NEOPLASMS (140-208)	39,466	1,440	18,047	13,098	3,949
BENIGN NEOPLASMS (210-229)					
OTHER SELECTED DIAGNOSES					
ACUTE DILATION OF STOMACH	86	5	18	21	17
CHRONIC LIVER DIS/CIRRHOSIS	516	14	164	171	97
CIRRHOSIS OF LIVER W/O ALCOHOL	6,125	37	1,426	2,682	1,278
CONTACT DERMATITIS	1,902	163	181	710	573
DERM DUE TO OTHER CHEM PROD	14	5	283	274	156
DERM DUE TO SOLVENTS	1	0	1	0	0
DERM DUE TO UNSPEC CAUSE	816	107	175	217	131
DIS OF SKIN	4,380	278	1,634	1,282	597
DYSCHROMIA	45,616	5,084	14,736	10,084	5,952
DYSPEPSIA ETC	40	8	15	8	6
OTHER CHRONIC NON ALCOH LIV DI	2,692	75	1,019	852	402
OTHER DIS DIGEST SVST	435	17	113	194	75
OTHER HYPERTROPHIC/ATROPHIC SK	100,078	942	28,821	29,302	19,150
UNSPEC HYPERTROPHIC LIV DIS W/O ALC	201	0	66	287	67
UNSPEC FUNCT DISORDER STOMACH	273	4	81	95	18
	1,150	31	473	338	146
					15
					162
					25
					70
					433
					219
					2
					0
					186
					587
					9,746
					3
					36
					21,834
					9
					3
					15
					162

HOSPITAL DISCHARGES BY SELECTED PRINCIPAL DIAGNOSES AND AGE GROUPS JACKSON COUNTY, 1983-1987

PRINCIPAL DIAGNOSIS (ICD-9)	NUMBER OF DISCHARGES				
	ALL	0-14	15-44	45-64	65-74
AGES *	YRS	YRS	YRS	YRS	YRS
ALL DISCHARGES	446,462	34,250	170,808	96,534	62,679
					82,004
NEOPLASMS					
BREAST CAN	2,079	2	268	812	513
BRONCH LUNG UNSPEC	1,872	2	68	839	639
DIGESTIVE CAN	3,395	7	120	1,037	975
GENITAL ORG CAN	2,864	3	252	1,798	890
LARYNX UNSPEC	114	0	5	53	33
LEUKEMIA	493	54	95	106	105
MAL MELANOMA OF SKIN	161	0	43	68	21
MAL NEO OF LARYNX	229	0	16	105	67
MAL NEO OF NASAL CAVITIES	28	0	0	7	9
MAL NEO OF PENIS ETC	13	0	3	5	2
MAL NEO OF SCROTUM	4	0	0	0	0
MAL NEO OTHER/ILL DEF SITE	1	0	0	0	0
MAL NEO TRENCH BRONCH LUNG	3,088	2	109	1,322	1,084
MULT MYELOMA	238	1	1	94	83
MULT MYELOMA IMMUNOPROLIF NEO	245	1	1	98	85
NASAL CAVITIES	12	0	0	5	2
OTHER CANCERS	6,615	114	835	2,352	1,758
OTHER MAL NEO OF SKIN	273	3	23	63	66
RESPIRAT CAN	3,393	2	138	1,455	1,167
URINARY ORGAN CAN	1,399	21	56	381	433
ALL NEOPLASMS (140-239)	26,414	416	4,602	8,764	6,460
MALIGNANT NEOPLASMS (140-208)	20,238	203	1,734	6,941	5,841
BENIGN NEOPLASMS (210-229)	5,110	171	2,557	1,553	5,459
OTHER SELECTED DIAGNOSES					
ACUTE DILATION OF STOMACH	9	0	0	1	3
ACUTE/SUBACUTE NECROSIS OF LIV	83	1	34	29	13
CHRONIC LIVER DIS/CIRRHOSIS	971	14	236	474	167
CIRRHOSIS OF LIVER W/O ALCOHOL	245	0	25	104	59
CONTACT DERMITIS	108	21	25	26	13
DERM DUE TO OTHER CHEM PROD	1	1	0	0	0
DERM DUE TO UNSPEC CAUSE	78	13	15	21	11
DIS FUNCT OF STOMACH	409	26	148	120	59
DIS OF SKIN	6,444	701	2,291	1,444	692
DYSCHROMIA	5	1	1	1	2
DYSPEPSIA ETC	308	12	111	96	48
OTHER CHRONIC NON ALCOH LIV DI	47	2	13	20	41
OTHER DIS DIGEST SYST	12,087	104	3,960	3,876	1,887
OTHER HYPERTROPIC/ATROPHIC SK	19	0	2	12	5
UNSPC HYPERTROPIC/ATROPHIC SK	51	1	25	19	4
UNSPC CHRONIC LIV DIS W/O ALC	13	0	4	3	2
UNSPC FUNCT DISORDER STOMACH	58	1	26	17	6

HOSPITAL DISCHARGES BY SELECTED PRINCIPAL DIAGNOSES AND AGE GROUPS
SELECTED ZIPCODES: 1983-1987

PRINCIPAL DIAGNOSIS (ICD-9)	NUMBER OF DISCHARGES				
	ALL	0-14	15-44	45-64	65-74
AGES * YRS					
ALL DISCHARGES	101,882	8,471	38,186	22,609	15,778
					16,802

NEOPLASMS					
BREAST CAN	409	1	44	149	116
BRONCH LUNG UNSPEC	487	1	18	226	173
DIGESTIVE CAN	862	2	26	226	257
GENITAL ORG CAN	717	0	42	224	229
LARYNX UNSPEC	32	0	1	16	7
LEUKEMIA	133	13	23	31	24
MAL MELANOMA OF SKIN	24	0	4	11	2
MAL NEO OF LARYNX	77	0	5	42	19
MAL NEO OF NASAL CAVITIES	4	0	0	0	2
MAL NEO OF PENIS ETC	7	0	2	3	1
MAL NEO OF SCROTUM	2	0	2	0	0
MAL NEO OTHER/ILL DEF SITE	1	0	0	0	1
MAL NEO TRENCH BRONCH LUNG	834	1	26	363	304
MULT MYELOMA	58	0	0	18	18
MULT MYELOMA IMMUNOPROLIF NEO	59	0	0	18	19
NASAL CAVITIES	2	0	0	0	1
OTHER CANCERS	1,456	26	150	516	420
OTHER MAL NEO OF SKIN	63	2	5	8	18
RESPIRAT CAN	930	1	34	411	329
URINARY ORGAN CAN	338	1	12	93	123
ALL NEOPLASMS (140-239)	6,094	101	891	2,041	1,645
MALIGNANT NEOPLASMS (140-208)	4,845	44	331	1,686	1,498
BENIGN NEOPLASMS (210-229)	1,005	50	464	293	1,119

OTHER SELECTED DIAGNOSES					
ACUTE/SUBACUTE NECROSIS OF LIV	20	0	9	8	2
CHRONIC LIVER DIS/CIRRHOSIS	249	4	56	128	40
CIRRHOSIS OF LIVER W/O ALCOHOL	68	0	2	35	17
CONTACT DERMITITIS	30	7	6	7	3
DERM DUE TO UNSPEC CAUSE	20	5	4	5	3
DIS FUNCT OF STOMACH	101	19	42	28	14
DYSPEPSIA ETC	1,625	33	615	357	200
OTHER CHRONIC NON ALCOH LIV DI	11	3	25	25	11
OTHER DIS DIGEST SYST	2,898	33	957	953	475
OTHER HYPERTROPHIC/ATROPHIC SK	1	0	0	0	1
UNSPC HYPERTROPHIC/ATROPHIC SK	3	0	2	1	0
UNSPC CHRONIC LIV DIS W/O ALC	4	0	0	1	0
UNSPC FUNCTION DISORDER STOMACH	22	1	15	2	1

* MAY INCLUDE DISCHARGES OF UNKNOWN AGE: 4126, 64127, 64128, 64129, 64052, 64053, AND 64054..

APPENDIX E

NATALITY DATA

(Selected Characteristics

— and Fetal Deaths)

Total Live Births by Selected Characteristics and Fetal Deaths for Selected Zip Codes: 1986-1990
Observed vs. Expected* Based on Missouri and County Rates
Kerr Chem

	Observed Anomalies	Expected Characteristics Based on State	Significant	Expected- Characteristics Based on County	Significant
<u>LIVE BIRTHS</u>					
Total Live Births	10,001				
Birth Weight <2500 G	1,023	694.1	YES	850.1	YES
Gestation <37 weeks	1,200	888.0	YES	999.1	YES
1-Min APGAR <8	2,715	2,148.2	YES	2,527.3	YES
5-Min APGAR <8	421	339.0	YES	403.0	NO
<u>FETAL DEATHS</u>					
Total Fetal Deaths	53	66.4	NO	68.4	NO

* For expected births/fetal deaths of 5 or more, Chi-Square Distribution was used.
For expected births/fetal deaths of less than 5, Poisson Distribution was used.

TOTAL LIVE BIRTHS BY SELECTED CHARACTERISTICS: NUMBER AND RATE PER 1,000 LIVE BIRTHS
 TOTAL FETAL DEATHS: NUMBER AND RATE PER 1,000 LIVE BIRTHS PLUS FETAL DEATHS
 FOR SELECTED AREAS OF RESIDENCE, 1986-1990

LIVE BIRTHS -----	MISSOURI		JACKSON COUNTY		SELECTED ZIPCODES	
	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE
TOTAL LB	382,937		54,069		10,001	
BIRTH WT <2500 G	26,576	69.4	4,334	82.0	1,023	102.3
GESTATION <37 WKS	34,020	88.8	5,400	99.9	1,200	120.0
1-MIN APGAR <8	82,260	214.8	13,662	252.7	2,715	271.5
5-MIN APGAR <8	12,987	33.9	2,181	40.3	421	42.1
FETAL DEATHS -----						
TOTAL FD	2,525	6.6	369	6.8	53	5.3

* SELECTED ZIPS 64120, 64123, 64124, 64125, 64126, 64127, 64128, 64129, 64052, 64053, 64054

APPENDIX F
NATALITY DATA
(Birth Defects)

Total Multi-Source Birth Defect Registry for Selected Areas: 1980-1986
Observed vs. Expected* Based on Missouri and County Rates
Kerr Chem

	Observed Anomalies	Expected Anomalies Based on State Rate	Significant Difference	Expected Anomalies Based on County Rate	Significant Difference
Total Live Births	16,536				
Births with Anomalies	933	663.1	YES	881.4	NO
Nervous System	26	29.8	NO	29.8	NO
Eye	11	9.9	NO	9.9	NO
Ear, Face & Neck	30	26.5	NO	31.4	NO
Circulatory System	141	124.0	NO	137.2	NO
Respiratory System	29	19.8	YES	24.8	NO
Cleft Lip/Palate	35	26.5	NO	29.8	NO
Other Upper Alimentary	16	39.7	YES	16.5	NO
Other Digestive	29	21.5	NO	26.5	NO
Genital Organs	138	97.6	YES	124.0	NO
Urinary Organs	25	14.9	NO	18.2	NO
Poly/Syndactyly	91	39.7	YES	72.8	NO
Club Foot	65	43.3	YES	44.6	YES
Dislocation of Hip	11	9.9	NO	9.9	NO
Limb Reduction	6	6.6	NO	6.6	NO
Other Musculoskeletal	122	86.0	YES	115.8	NO
Skin, Hair, Nails	166	72.8	YES	178.6	NO
Chromosomal Anomalies	21	21.5	NO	23.2	NO
Other Anomalies	128	84.3	YES	122.4	NO

* For expected anomalies of 5 or more, Chi-Square distribution was used.
For expected anomalies of less than 5, Poisson Distribution was used.

TOTAL MULTI-SOURCE BIRTH DEFECT REGISTRY: NUMBER AND RATE PER 1,000 LIVE BIRTHS
FOR SELECTED AREAS OF RESIDENCE: 1980-1986

	MISSOURI	JACKSON	SELECTED
	NUMBER	NUMBER	ZIPCODES
	RATE	RATE	RATE
	----	----	----
TOTAL LIVE BIRTHS	533,734	73,930	16,536
BIRTHS WITH ANOMALIES	21,413	3,941	933
		53.3	56.4

ANOMALIES BY TYPE**

	MISSOURI	JACKSON	SELECTED
	NUMBER	NUMBER	ZIPCODES
	RATE	RATE	RATE
	----	----	----
NERVOUS SYSTEM	986	135	26
EYE	323	47	11
EAR, FACE, NECK	841	137	11
CIRCULATORY SYSTEM	4,001	611	30
RESPIRATORY SYSTEM	657	114	141
CLEFT LIP/PALATE	873	135	29
OTHER UPPER ALIMENTARY	1,303	175	35
OTHER DIGESTIVE	1,693	116	16
GENITAL ORGANS	3,126	553	29
URINARY ORGANS	479	78	138
POLY/SYNDACTYLY	1,286	324	25
CLUB FOOT	1,503	196	91
DISLOCATION OF HIP	313	42	65
LIMB REDUCTION	228	26	11
OTHER MUSCULOSKELETAL	2,772	519	6
SKIN, HAIR, NAILS	2,322	799	122
CHROMOSOMAL ANOMALIES	681	101	166
OTHER ANOMALIES	2,696	545	21
			128

* SELECTED ZIPCODES ARE 64120, 64123, 64124, 64125, 64126, 64127, 64128, 64129, 64052, 64053, AND 64054

** A CHILD MAY HAVE MORE THAN ONE ANOMALY

MISSOURI CANCER REGISTRY
MISSOURI DEPARTMENT OF HEALTH
STATE OF MISSOURI

CANCER CASES DIAGNOSED IN 1985-89

ZIP=64052

TABLE OF SITES BY AGEHO

SITEN	AGEHO	0 TO 14	15 TO 44	45 TO 64	65 TO 74	75, PLUS	TOTAL
FREQUENCY							
BRONCHUS & LUNG		0	4	40	35	26	105
LARYNX		0	0	6	2	1	9
MELANOMA		0	1	0	4	1	6
MULTIPLE MYELOMA		0	0	1	4	2	7
NASAL CAVITIES		0	0	1	0	0	1
OTHER CANCER SIT		3	26	118	124	122	393
RESPIRATORY ORGA		0	0	0	1	0	1
SKIN CANCER		0	2	4	2	5	13
TOTAL		3	33	170	172	157	535

DATA UPDATED TO 3RD QUARTER 1991

MISSOURI CANCER REGISTRY
MISSOURI DEPARTMENT OF HEALTH
STATE OF MISSOURI

CANCER CASES DIAGNOSED IN 1985-89

ZIP=64052

TABLE OF SITES BY DX_YR

SITE DX_YR YEAR OF FIRST DIAGNOSIS OF THIS CANCER.

FREQUENCY	85	86	87	88	89	TOTAL
BRONCHUS & LUNG	23	22	22	22	16	105
LARYNX	2	3	2	2	0	9
MELANOMA	4	0	0	2	0	6
MULTIPLE MYELOMA	2	0	0	2	3	7
NASAL CAVITIES	0	0	1	0	0	1
OTHER CANCER SIT	89	82	87	64	71	393
RESPIRATORY ORGA	0	1	0	0	0	1
SKIN CANCER	6	3	2	0	2	13
TOTAL	126	111	114	92	92	535

DATA UPDATED TO 3RD QUARTER 1991